

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No.: 10/541,828  
Applicant: Ganga Raju Gokaraju  
Filed: July 12, 2005  
Examiner: Valenrod, Yevgeny  
Docket No.: DAD-0013  
For: New double salts of (-)-hydroxycitric acid and a process  
for preparing the same

Commissioner of Patents  
P.O. Box 1450  
Alexandria VA 22313-1450

### DECLARATION UNDER 37 C.F.R. § 1.132

1, Dr. L. S. A. Dikshilhulu, hereby declare and state as follows:

1. I have been working presently as a Senior Professor, Chemistry Department, Gayatri Engineering College, Visakhapatnam, Andhra Pradesh, India. Prior to this position, I was a Professor of Inorganic Chemistry, School of Chemistry, Andhra University for more than 30 years. I also served as Director, School of Chemistry, Andhra University for one year. Seven Ph. D. candidates and six M. Phil. candidates have been graduated under my supervision. I published more than fifty research publications in the area of Inorganic Chemistry in reputed journals. I also authored four textbooks.

2. I have read the patent application entitled "New double salts of (-)-hydroxycitric acid and a process for preparing the same," serial number 10/541,828, which was filed July 12, 2005. I understand that the pending claims are directed to new double salts of (-)-hydroxycitric Acid.

3. I am aware that at the Examiner has issued a final office action. In particular, I

understand that the Examiner has rejected the pending claims 1-5, 12-16 and 19 as being unpatentable over Shrivastava et al. (US 6,221,901).

4. I make this declaration to rebut the Examiner's assertion, with which I do not agree. It is my opinion that the claimed double salts of (-)-hydroxycitric acid described in the current claims are not anticipated by Shrivastava et al. (US 6,221,901), at least for the following reasons.

5. While making magnesium hydroxycitrate (US 6,221,901), magnesium forms a salt with two carboxylate groups of hydroxycitric acid and the third carboxylate should also form salt with a magnesium ion to satisfy the valency. No free carboxylic acids remain to form a salt with another metal ion.

6. The composition comprising magnesium hydroxycitrate and a metal (Zinc), either in ionized form or in non-ionized form is a physical blend and will not form a double salt. This is because the suggested zinc ions are insoluble in water. There is no way for a zinc ion to incorporate into the magnesium hydroxycitrate salt by replacing one of the magnesium ions.

7. The ionic potential of  $\text{Zn}^{2+}$  ion is considerably less than that of  $\text{Mg}^{2+}$  ion. Hence, the possibility of replacing  $\text{Mg}^{2+}$  ion in magnesium hydroxycitrate by a  $\text{Zn}^{2+}$  ion is highly remote.

8. In conclusion, the double salt of hydroxy citric acid with magnesium and zinc is different from the composition formed by a physical blend of magnesium hydroxycitrate and zinc metal or zinc salt.

9. The claimed double salt, which has activity relating to osteoporosis, is not obvious to try to make in view of U.S. Patent No. 6,221,901, given the unpredictable nature of the art.

10. I further declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further, that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent resulting therefrom.

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Signature